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(71) Applicant (for all designated States except US): GENETICA, INC. [US/US]; David Beach, 100 Bungtown Road, Cold Spring Harbor, NY 11724 (US).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): HANNON, Gregory, J. [US/US]; 92 Sammis Street, Huntington, NY 11743 (US). BEACH, David, H. [GB/US]; 19 Woodland Drive, Huntington Bay, NY 11743 (US).
- (74) Agents: VINCENT, Matthew, P. et al.; Foley, Hoag & Eliot, LLP, One Post Office Square, Boston, MA 02109 (US).

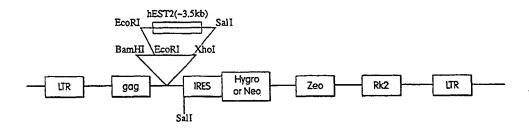
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(57) Abstract

The present invention relates to methods and reagents for extending the life-span, e.g. the number of mitotic divisions, of a cell. In general, the subject method relies on the activation of a telomerase activity and inhibition of one or both of an Rb/p16 pathway or a p53 pathway.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07K14/47 A61k A61K7/48 A61K38/17 A61K31/00 A61P17/02 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 C07K A61K Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, BIOSIS C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Y.P WO 99 35243 A (COLD SPRING HARBOR 1,2,5-48LABORATORY) 15 July 1999 (1999-07-15) cited in the application claims 1-52 Y,P WO 99 42578 A (COLD SPRING HARBOR 1,2,5-48LABORATORY) 26 August 1999 (1999-08-26) claims 1-32 χ WO 96 12820 A (COLD SPRING HARBOR 4,23-36, LABORATORY) 2 May 1996 (1996-05-02) 46,47 claims 1-28 Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: T* later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 7 July 2000 20/07/2000 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Siatou, E Fax: (+31-70) 340-3016

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